



Training Medical Assistants: Enhancing the Role of CMAs in Hypertension Control

Learning Objectives

- What role do Certified Medical Assistants (CMA) play in hypertension management?
- Review a model for training CMAs
 - Competency Based Orientation Program (CBOR)
 - Annual competency reassessment
- Outcomes

Johns Hopkins Community Physicians



- 36 outpatient sites
- 11 counties, Baltimore City
- 200 PCPs
- 1000 staff
- 750 K encounters
- 220 K patients
- EMR & Disease registry
- 61 K with HTN

Role of Medical Assistants in HTN Management



- Patient intake for clinician visits
 - Accurate blood pressure measurement
 - Medicine reconciliation
 - Refill set-up
 - Patient education
- Interval visits: “blood pressure checks”
- *Health coaching*

Who measures the BP?

- Medicine relies on team-based care
- Non-licensed staff provide most support in ambulatory care
 - Variable training standards
 - No standards for maintenance of competency
 - Staff unaware of their own skills gaps.
- Well-trained CMAs can contribute to desired outcomes

Scope of Practice: RN, LPN, MA



Title	Education	Licensing-certification	What can be delegated	Limitations
Nurses RN,BSN	BSN:3-4 yr. degree Diploma: 3 yr. hospital based training	Licensed; Nursing boards NCLEX	Assess and triage Analyze patient data Determine nursing diagnosis Plan of care Patient Education	May not diagnose or prescribe; delegation is limited.
LPN/LVN	High school diploma w 8- 12 mo. in college or career school	Licensed, though scope of license is different than RN's	Limited practice compared to RN; Collaborates with patient, family, RN and other providers	Limited compared to RN; May NOT triage or assess
Medical assistants	High school diploma; 6 -18 mo. practical MA program	Non-licensed; Medical Assistant Exam (CMA, RMA)	Practice under the delegating physician license	May not triage or assess; role in education is limited to providing material

Training & Competency Program

1. Competency Based Orientation Program (CBOR)

- Assessment of core clinical skills and knowledge
- Occurs prior to practice
- Develop personal action plan
- Communication with supervisor and mentor

2. Interval Visit Training (“BP check”)

3. Annual Competency Reassessment

- Skills verification by observer
- Knowledge assessment

Competency Based Orientation Elements

- Blood Pressure Measurement
- Syringe Competency
- Intradermal Injection
- Induration Measurement



CBOR Pass Rates

Cohort	N	Intradermal Pass Rate	Blood Pressure Pass Rate	Syringe Pass Rate	
				Pre-Instructions [‡]	Post-Instructions
Cohort 1, 2003	111	91%*	90%*	n.a.	52%
Cohort 2, 2004-2009	240	91%	84% (P=0.171)	n.a.	62% [‡] (P=0.082)
Cohort 3, 2010-2011	92	94%	92% [‡] (P=0.041)	n.a.	71% [‡] (P=0.144)
Cohort 4, 2011-2012	35	89%	94% (P=0.710)	20%	74% [‡] (P=0.685)
All Combined [†]	478	92%	90%	n.a.	62%

Interval visits: “Blood pressure checks”

- Provider-ordered visits following med adjustments
- EMR template supported measurement & appropriate decision making:
 - Goal BP
 - Med Review including side effects
 - Education prompts
 - Notify parameters

PSV: BP Assessment: ARLENE ABCDE

BP Assessment | BP Assessment cont'd

Chief Complaint: Blood pressure monitoring

History

If the patient answers YES to any of the following questions, consult a provider after checking BP.

Is the patient experiencing any of the following symptoms:

Headache:	<input type="radio"/> Yes	<input type="radio"/> No	Additional Hc:	<input type="text"/>
Visual disturbance (spots/blurred):	<input type="radio"/> Yes	<input type="radio"/> No	Additional Hc:	<input type="text"/>
Edema/SOB:	<input type="radio"/> Yes	<input type="radio"/> No	Additional Hc:	<input type="text"/>
Dizziness:	<input type="radio"/> Yes	<input type="radio"/> No	Additional Hc:	<input type="text"/>
Nausea/vomiting:	<input type="radio"/> Yes	<input type="radio"/> No	Additional Hc:	<input type="text"/>
Epistaxis:	<input type="radio"/> Yes	<input type="radio"/> No	Additional Hc:	<input type="text"/>

Concerns about medications or side effects: ☐ Yes ☐ No

Verify understanding and compliance:

Update Meds

Current Medications: FOCALIN XR 10 MG CP24 (DEXMETHYLPHENIDATE HCL) Take one tablet by mouth every morning. DIAGNOSIS: ADHD
PAROXETINE HCL 20 MG TABS (PAROXETINE HCL) Take 1 tablet by mouth daily for depression. [BMN]
NICARDIPINE HCL 30 MG CAP (NICARDIPINE HCL) Take 1 capsule by mouth once a day

Review: ☐ Patient does not know any of his/her meds
☐ Patient out of one or more med.
☐ Patient has not been taking one or more med

☐ I reviewed the med list above and patient verifies these are correct
☐ I reviewed the med list but the patient is not sure what medications they are taking
☐ I reviewed the med list and the patient indicates the following discrepancies:

Comments:

Physical

General Appearance: ☐ In no distress ☐ Other

Open Vitals

Blood Pressure:

Previous BP: 120 / 80 (07/11/2011 1:47:57 PM) Blood Pressure #1: / mm Hg
Previous BP: / Blood Pressure #2: / mm Hg
Previous BP: / Blood Pressure #3: / mm Hg

Systolic BP <90 or >140 (or >130 for diabetics): ☐ Yes ☐ No
Diastolic BP <60 or >90 (or >85 for diabetics): ☐ Yes ☐ No

Comments:

If BP is outside specified range, have patient rest and repeat BP after 15-20 mins.

Previous Pulse: 66 (07/10/2011 10:17:08 AM) Pulse:

Comments:

PCP Consulted: ☐ Yes ☐ No

Prev Form (Ctrl+PgUp) | Next Form (Ctrl+PgDn) | Close

Annual Competency Reassessment

- Address decay of skills/knowledge
- Internal needs assessment:
 - PSNs, anecdotes, practice input
 - Interprofessional Team, Management & HR
- Program content & development
- Resources: Geography, staff, consistency, time and availability
- Two cycles completed since summer 2012

Annual Competency Reassessment

Skills

- Blood pressure
- Intradermal injection
- Syringe volumes
- Pediatric & Adult SQ and IM injection

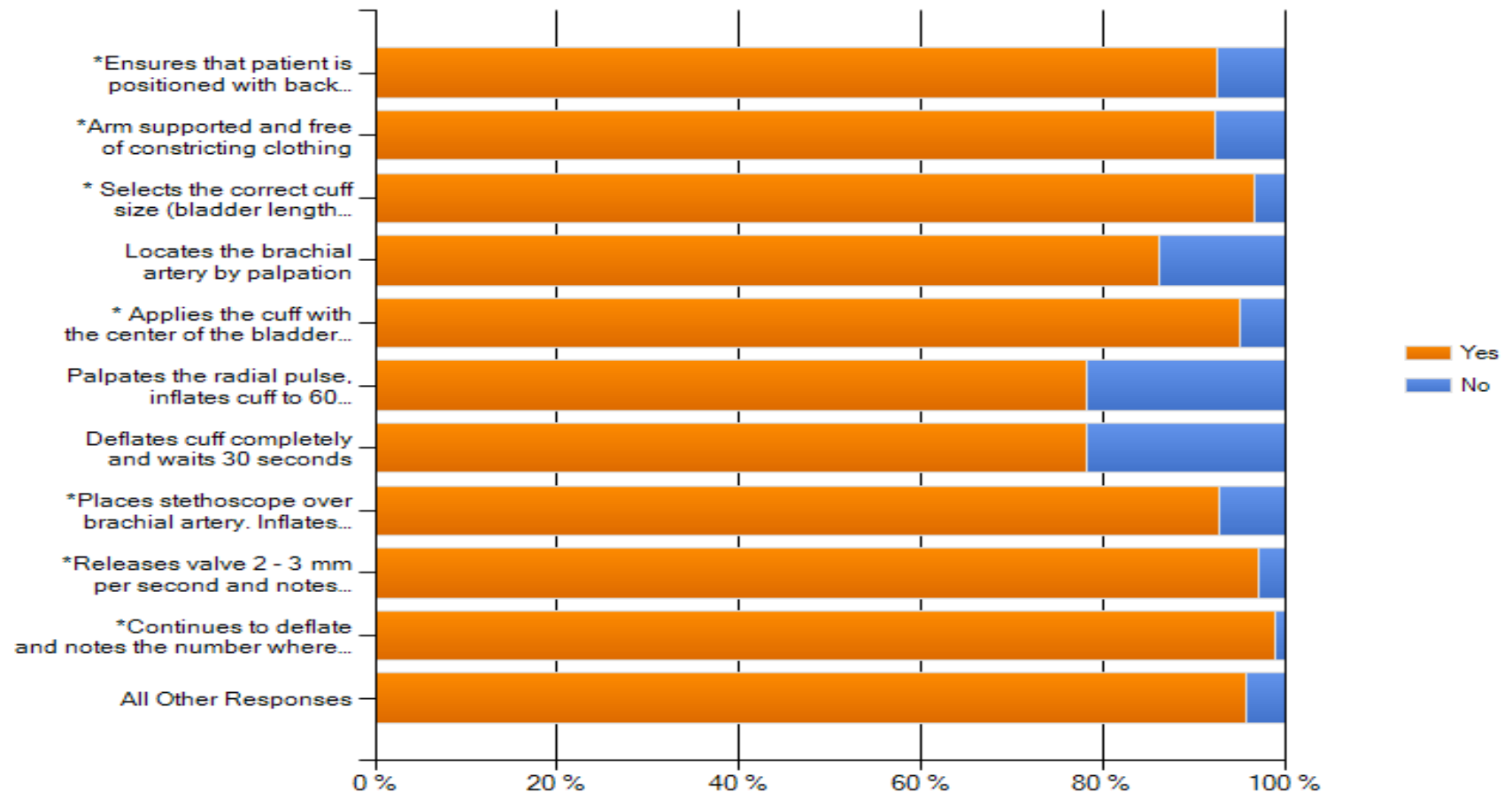
Knowledge

- Meds, Vaccines
- Procedures & Safety



Blood Pressure Measurement

Blood Pressure Measurement



Pass Rates: Blood Pressure Measurement*



- Registered Nurse (56): 89.3%
- Licensed Practical Nurse (19): 84.2%
- Certified Medical Assistant (217): 82.9%
- Overall (292): 84.2%

**All staff were remediated and were subsequently able to pass required elements.*

Outcomes

- Providers highly satisfied with CMA skills:
 - BP measurement: 90.3%
 - Perform/record other vital signs: 96.1%
 - Reviewing & set up medication refills: 79.4%
 - Administer immunizations: 96.1%
 - Perform and measure PPD: 92.2%
- Among 51,158 unique patients with HTN seen 4/4/13 through 1/31/14, 65% controlled*

Conclusions

- Medical assistants are important members of primary care teams who can assist HTN control.
- Competency assessments of CMAs show significant skills deficits that can be corrected.
- Periodic reassessment showed significant skills drift, including BP measurement.
- Training contributes to successful CMA involvement in systemic effort to control HTN.